

# STRUCTURE AND METHOD OF FORMING BIPOLAR TRANSISTOR HAVING A SELF- ALIGNED RAISED EXTRINSIC BASE USING SELF-ALIGNED ETCH STOP LAYER

## Abstract

A bipolar transistor structure and method of making the bipolar transistor are provided. The bipolar transistor includes a collector region, an intrinsic base layer overlying the collector region, and an emitter overlying the intrinsic base layer. An opened etch stop layer includes a layer of dielectric material overlying the intrinsic base, the opened etch stop layer self-aligned to the emitter. The bipolar transistor further includes a raised extrinsic base self-aligned to the emitter, the raised extrinsic base overlying the intrinsic base layer.